

L Number	Hits	Search Text	DB	Time stamp
2	4620	aventis\$.as.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:03
3	21289	muller-\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:03
4	1555	koller-\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:03
5	359	boles-\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:04
6	3	wieczorke-\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:04
7	4	Dlugai-\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:04
8	1530	muller-g\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:04
9	2	koller-\$.in. and boles-\$.in. and muller-g\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:05
10	20	aventis\$.as. and (koller-\$.in. or boles-\$.in. or muller-g\$.in.)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:05
11	138105	fungi or yeast or saccharomyces or cerevisiae or Schizosaccharomyces or Saccharomycetales	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:05
12	426	glut4 or slc2a4 or insulin\$1 adj responsive adj glucose adj transport\$5 or facilitated adj glucose adj transport\$5 or glucose adj transporter adj type adj boles-\$.in.	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:06
16	202	(fungi or yeast or saccharomyces or cerevisiae or Schizosaccharomyces or Saccharomycetales) and (glut4 or slc2a4 or insulin\$1 adj responsive adj glucose adj transport\$5 or facilitated adj glucose adj transport\$5 or glucose adj transporter adj type adj boles-\$.in.)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:08
17	31	(fungi or yeast or saccharomyces or cerevisiae or Schizosaccharomyces or Saccharomycetales) same (glut4 or slc2a4 or insulin\$1 adj responsive adj glucose adj transport\$5 or facilitated adj glucose adj transport\$5 or glucose adj transporter adj type adj boles-\$.in.)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:08
18	2	(fungi or yeast or saccharomyces or cerevisiae or Schizosaccharomyces or Saccharomycetales) near (glut4 or slc2a4 or insulin\$1 adj responsive adj glucose adj transport\$5 or facilitated adj glucose adj transport\$5 or glucose adj transporter adj type adj boles-\$.in.)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:08
19	1	DSM adj "14035" or DSM adj "14036" or DSM adj "14037" or DSM adj "14038" or DSM adj "14039" or DSM adj "14040"	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:09

20	1	DSM near "14035" or DSM near "14036" or DSM near "14037" or DSM near "14038" or DSM near "14039" or DSM near "14040"	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:09
21	1	H2rg4g2 or HXT2 adj promoter near (glut4 or slc2a4)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:09
22	1	yep4h7-Hsglut4 or HXT7 adj promoter near (glut4 or slc2a4)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:10
23	3	aventis\$.as. and (glut4 or slc2a4 or insulin\$1 adj responsive adj glucose adj transport\$5 or facilitated adj glucose adj transport\$5 or glucose adj transporter adj type adj boles-\$.in.)	USPAT; US-PGPUB; EPO; DERWENT	2004/05/14 09:10

Dialog Search

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Examiner's Search
Notes

in **Glut4** less than two-fold difference was seen between these two K(m) values; and (2) Glut1 was inhibited with pCMB, pCMBS and low concentrations of HgCl2 (IC50, 3.5 microM), whereas **Glut4** was almost insensitive to SH reagents. To examine the role of the exofacial cysteine, we replaced Met-455 of **Glut4** (corresponding to Cys-429 of Glut1) with cysteine. The **mutated Glut4** was inhibited by pCMB or pCMBS and the IC50 of HgCl2 decreased to 47 microM, whereas K(m), substrate specificity and the sensitivity to cytochalasin B were not significantly changed, indicating that the existence of exofacial cysteine contributed only to increase SH sensitivity in **Glut4**.

Tags: Support, Non-U.S. Gov't

Descriptors: *Monosaccharide Transport Proteins--metabolism--ME; *Saccharomyces cerevisiae--genetics--GE; Animals; Biological Transport; Cell Membrane--chemistry--CH; Cytochalasin B--pharmacology--PD; Glucose--metabolism--ME; Kinetics; Liposomes; Mercuric Chloride--pharmacology--PD; Molecular Sequence Data; Monosaccharide Transport Proteins--antagonists and inhibitors--AI; Monosaccharide Transport Proteins--chemistry--CH; Monosaccharide Transport Proteins--genetics--GE; **Mutation**; Phloretin--pharmacology--PD; Phlorhizin--pharmacology--PD; Rats; Substrate Specificity

Molecular Sequence Databank No.: GENBANK/D28561

CAS Registry No.: 0 (GLUT-1 protein); 0 (GLUT-4 protein); 0 (Liposomes); 0 (Monosaccharide Transport Proteins); 14930-96-2 (Cytochalasin B); 50-99-7 (Glucose); 60-81-1 (Phlorhizin); 60-82-2 (Phloretin); 7487-94-7 (Mercuric Chloride)

Record Date Created: 19970403

Record Date Completed: 19970403

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Set	Items	Description
S1	351101	BUDDING(W) YEST OR SACCHAROMYCES
S2	11852	GLUT4 OR GLUCOSE(W) TRANSPORTER(W) 4
S3	529349	MUTAGEN?
S4	19	S1(S) S2
S5	0	S3 AND S4 AND PY<=2001
S6	3824301	MUT? OR SELECTION OR SUPPRESSOR
S7	14	S4 AND S6
S8	8	S7 AND PY<=2001

? show files

File 5: Biosis Previews(R) 1969-2004/May W1
(c) 2004 BIOSIS

File 34: SciSearch(R) Cited Ref Sci 1990-2004/May W1
(c) 2004 Inst for Sci Info

File 35: Dissertation Abs Online 1861-2004/Apr
(c) 2004 ProQuest Info&Learning

File 40: Enviroline(R) 1975-2004/Apr

File 50: CAB Abstracts 1972-2004/Apr
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File 65: Inside Conferences 1993-2004/May W2
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File 71: ELSEVIER BIOBASE 1994-2004/May W1
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File 91: MANTIS(TM) 1880-2004/Dec
2001 (c) Action Potential

File 94: JICST-EPlus 1985-2004/Apr W3
(c) 2004 Japan Science and Tech Corp(JST)

File 98: General Sci Abs/Full-Text 1984-2004/May
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File 110: WasteInfo 1974-2002/Jul

(c) 1998 Inst for Sci Info
File 467:ExtraMED(tm) 2000/Dec
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*File 467: For information about updating status please see Help News467.

Set	Items	Description
---	-----	-----
? s dsm(w)	14035 or dsm(w)14036 or dsm(w)14037	
	92319	DSM
	73	14035
	1	DSM(W)14035
	92319	DSM
	32	14036
	0	DSM(W)14036
	92319	DSM
	37	14037
	0	DSM(W)14037
S1	1	DSM(W)14035 OR DSM(W)14036 OR DSM(W)14037
? t s1/medium,k/all		

1/K/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

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0300316 DBR Accession No.: 2003-02100 PATENT

New strains of yeast, useful in screening for modulators of hexose transport, potential antidiabetic and antiobesity agents, lack native hexose-transport function - vector-mediated gene transfer and expression in host cell for strain improvement and drug screening

AUTHOR: MUELLER G; KOLLER K; BOLES E; WIECZORKE R; DLUGAI S

PATENT ASSIGNEE: AVENTIS PHARMA DEUT GMBH 2002

PATENT NUMBER: WO 200264784 PATENT DATE: 20020822 WPI ACCESSION NO.: 2002-636632 (200268)

PRIORITY APPLIC. NO.: DE 1006718 APPLIC. DATE: 20010214

NATIONAL APPLIC. NO.: WO 2002EP1373 APPLIC. DATE: 20020209

LANGUAGE: German

...ABSTRACT: encoding Glut1 protein with one of the mutations V69M or A70M; and (7) Glut1 proteins encoded by (II). BIOTECHNOLOGY - Preferred Strains: (A) is any of **DSM 14035**, 14036 or 14037; or where it contains a GLUT4 gene, DSM 14038, 14039 or 14040; or where it contains a GLUT1 gene, DSM 14026, 14027...

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=> d his

STN SEARCH

(FILE 'HOME' ENTERED AT 12:24:53 ON 14 MAY 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 12:25:12 ON 14 MAY 2004

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 12:25:52 ON 14 MAY 2004

L1 0 S "EBY.18GA"
L2 0 S (EBY.S7.)
L3 0 S "EBY.S7."
L4 75 S (YEAST OR SACCHAROMYCES OR CEREVISIAE) AND GLUT4
L5 43 S (YEAST OR SACCHAROMYCES OR CEREVISIAE) AND ((COMPLEMENT? OR E
L6 19 DUPLICATE REMOVE L5 (24 DUPLICATES REMOVED)
L7 114566 S (MULLER, ?)/IN,AU
L8 11018 S (KOLLER, ?)/IN,AU
L9 2149 S (BOLES, ?)/IN,AU
L10 10 S (DLUGAI, ?)/IN,AU
L11 127616 S L6 OR L7 OR L8 OR L9 OR L10
L12 127601 S L7 OR L8 OR L9 OR L10
L13 4 S L12 AND L6
L14 4 DUPLICATE REMOVE L13 (0 DUPLICATES REMOVED)
L15 15 S L6 NOT L13

information.

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 1998 Inst for Sci Info

File 467:ExtraMED(tm) 2000/Dec

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*File 467: For information about updating status please see Help News467.

Set	Items	Description
?	s	DSM(w)14035 or DSM(w)14036 or DSM(w)14037 or DSM(w)14038 or DSM(w)14039 or DSM(w)14040
	92373	DSM
	73	14035
	1	DSM(W)14035
	92373	DSM
	32	14036
	0	DSM(W)14036
	92373	DSM
	37	14037
	0	DSM(W)14037
	92373	DSM
	33	14038
	1	DSM(W)14038
	92373	DSM
	16	14039
	0	DSM(W)14039
	92373	DSM
	97	14040
	0	DSM(W)14040
S1	1	DSM(W)14035 OR DSM(W)14036 OR DSM(W)14037 OR DSM(W)14038 OR DSM(W)14039 OR DSM(W)14040
?	s	H2rg4g2 or HXT2(w)promoter(s)(glut4 or slc2a4)
	1	H2RG4G2
	203	HXT2
	605221	PROMOTER
	11049	GLUT4
	3	SLC2A4
	0	HXT2(W) PROMOTER(S) (GLUT4 OR SLC2A4)
S2	1	H2RG4G2 OR HXT2(W) PROMOTER(S) (GLUT4 OR SLC2A4)
?	s	yep4h7-Hsglut4 or HXT7(w)promoter(s)(glut4 or Slc2a4)
	0	YEP4H7-HSGLUT4
	97	HXT7
	605221	PROMOTER
	11049	GLUT4
	3	SLC2A4
	0	HXT7(W) PROMOTER(S) (GLUT4 OR SLC2A4)
S3	0	YEP4H7-HSGLUT4 OR HXT7(W) PROMOTER(S) (GLUT4 OR SLC2A4)
?	rd	
>>>Set has no items to process.		
...completed examining records		
S4	0	RD (unique items)
?	t	sl/3,k/all

1/3,K/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

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0300316 DBR Accession No.: 2003-02100 PATENT

New strains of yeast, useful in screening for modulators of hexose transport, potential antidiabetic and antiobesity agents, lack native hexose-transport function - vector-mediated gene transfer and